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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,202	10/21/2003	Keith Edward Forrester		3679
7590	10/11/2005			
Keith E. Forrester 78 Tracy Way Meredith, NH 03253			EXAMINER KRECK, JOHN J	
			ART UNIT	PAPER NUMBER

3673

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*He*

## Office Action Summary

Application No.

10/690,202

Applicant(s)

FORRESTER, KEITH EDWARD

Examiner

John Kreck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 10 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                                        | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Applicant's election without traverse of species (a) "air-borne particulate treatment" in the reply filed on 8/18/05 is acknowledged.
2. Claims 11-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/18/05.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9, 10, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vitenko (U.S. Patent number 3,665,681) in view of Caballero (U.S. Patent number 3,353,335).

Vitenko discloses the process comprising contacting particulate within particulate emissions after a particulate capture unit with water—not including lime. Vitenko fails to explicitly teach the heavy metals, and also lacks the contacting with an agent to reduce leaching.

Official Notice is taken of the fact that it is well known to employ such processes on smoke containing heavy metals, in order to prevent pollution. It would have been obvious to one of ordinary skill in the art at the time of the invention to have practiced the Vitenko process on heavy metal containing smoke.

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Cabellero teaches a similar process, which advantageously contacts air-borne particulate with a complexing agent, in order to further reduce pollution.

It would have been further obvious to one of ordinary skill in the art at the time of the invention to have further modified the Vitenko process to have included contacting with a complexing agent in an amount effective to reduce leaching of heavy metals as called for in claim 1.

Regarding claim 2: Caballero teaches at least the phosphates.

Regarding claim 3: Caballero teaches at least the alkali metal salts of phosphoric acid.

Regarding claim 4: Caballero teaches at least the trisodium phosphate.

Regarding claim 5: Caballero teaches at least the phosphates, and further teaches the at least surfactant and/or the sulfate.

Regarding claim 6: Caballero teaches at least surfactant and/or sulfate and boron (borax).

Vitenko and Caballero both teach above ambient temperature as called for in claim 9.

Vitenko discloses the base of the emission stack as called for in claim 10.

Regarding independent claim 18:

Vitenko discloses the process comprising contacting particulate within particulate emissions after a particulate capture unit with water—not including lime. Vitenko fails to

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explicitly teach the heavy metals, and also lacks the contacting with an agent to reduce leaching.

Official Notice is taken of the fact that it is well known to employ such processes on smoke containing heavy metals, in order to prevent pollution. It would have been obvious to one of ordinary skill in the art at the time of the invention to have practiced the Vitenko process on heavy metal containing smoke.

Cabellero teaches a similar process, which advantageously contacts air-borne particulate with a complexing agent, in order to further reduce pollution.

It would have been further obvious to one of ordinary skill in the art at the time of the invention to have further modified the Vitenko process to have included contacting with a complexing agent in an amount effective to reduce leaching of heavy metals as called for in claim 18.

Regarding claims 19 and 20: Caballero teaches at least the trisodium phosphate.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nordone (U.S. Patent number 3,435,593) discloses a similar process.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-6,9,10, and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

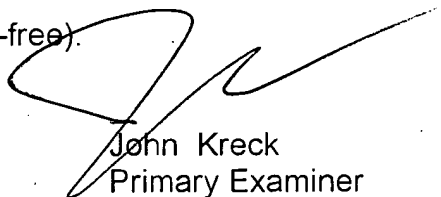
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is 571-272-7042. The examiner can normally be reached on M-F 5:30 am - 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on 571-272-7049. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Kreck  
Primary Examiner  
Art Unit 3673

4 October 2005